Supreme Court of the United States.

No. 3, Original.—October Term, 1906.

The State of Kansas, Complainant,
vs.
The State of Colorado et al., Defendants, The United States of America, Intervenor.
} In Equity.

[May 13, 1907.]

On May 20, 1901, pursuant to a resolution passed by the legislature of Kansas, (Laws Kansas, 1901, chap. 425,) and upon leave obtained, the State of Kansas filed its bill in equity in this court against the State of Colorado. To this bill the defendant demurred. After argument on the demurrer this court held that the case ought not to be disposed of on the mere averments of the bill, and, therefore, overruled the demurrer without prejudice to any question defendant might present. Leave was also given to answer. 185 U. S. 125. In delivering the opinion of the court the Chief Justice disclosed in the following words the general character of the controversy, and the conclusions arrived at: (p. 145)

"The gravamen of the bill is that the State of Colorado, acting directly herself as well as through private persons thereto licensed, is depriving and threatening to deprive the State of Kansas and its inhabitants of all the water heretofore accustomed to flow in the Arkansas River through its channel on the surface, and through a subterranean course across the State of Kansas; that this is threatened not only by the impounding and the use of the water at the river's source, but as it flows after reaching the river. Injury, it is averred, is being, and would be, thereby inflicted on the State of Kansas as an individual owner, and on all the inhabitants of the State, and especially on the inhabitants of that part of the State lying in the Arkansas Valley. The injury is asserted to be threatened, and as being wrought, in respect of lands located on the banks of the river; lands lying on the line of a subterranean flow; and lands lying some distance from the river, either above or below ground, but dependent on the river for a supply of water. And it is insisted that Colorado in doing this is violating the fundamental principle that one must use his own so as not to destroy the legal rights of another.

"The State of Kansas appeals to the rule of the common law that owners of lands on the banks of a river are entitled to the continual flow of the stream, and while she concedes that this rule has been modified in the Western States so that flowing water may be appropriated to mining purposes and for the reclamation of arid lands, and the doctrine of prior appropriation obtains, yet she says that that modification has not gone so far as to justify the destruction of the rights of other States and their

inhabitants altogether; and that the acts of Congress of 1866 and subsequently, while recognizing the prior appropriation of water as in contravention of the common law rule as to a continuous flow, have not attempted to recognize it as rightful to that extent. In other words, Kansas contends that Colorado cannot absolutely destroy her rights, and seeks some mode of accommodation as between them, while she further insists that she occupies, for reasons given, the position of a prior appropriator herself, if put to that contention as between her and Colorado.

"Sitting, as it were, as an international as well as a domestic tribunal, we apply Federal law, State law, and international law, as the exigencies of the particular case may demand, and we are unwilling, in this case, to proceed on the mere technical admissions made by the demurrer. Nor do we regard it as necessary, whatever imperfections a close analysis of the pending bill may disclose, to compel its amendment at this stage of the litigation. We think proof should be made as to whether Colorado is herself actually threatening to wholly exhaust the flow of the Arkansas River in Kansas; whether what is described in the bill as the 'underflow' is a subterranean stream flowing in a known and defined channel, and not merely water percolating through the strata below; whether certain persons, firms and corporations in Colorado must be made parties hereto; what lands in Kansas are actually situated on the banks of the river, and what, either in Colorado or Kansas, are absolutely dependent on water therefrom; the extent of the water-shed or the drainage area of the Arkansas River; the possibilities of the maintenance of a sustained flow through the control of flood waters; in short, the circumstances, a variation in which might induce the court to either grant, modify, or deny the relief sought or any part thereof."

On August 17, 1903, Kansas filed an amended bill, naming as defendants Colorado and quite a number of corporations, who were charged to be engaged in depleting the flow of water in the Arkansas River. Colorado and several of the corporations answered. For reasons which will be apparent from the opinion the defenses of these corporations will not be considered apart from those of Colorado. On March 21, 1904, the United States, upon leave, filed its petition of intervention. The issue between these several parties having been perfected by replications, a commissioner was appointed to take evidence, and after that had been taken and abstracts prepared counsel for the respective parties were heard in argument, and upon the pleadings and testimony the case was submitted.

In order that the issue between the three principal parties, Kansas, Colorado and the United States, may be fully disclosed—although by so doing we prolong considerably this opinion—we quote abstracts of the pleadings and statements thereof made by the respective counsel. Counsel for Kansas say:

"The bill of complaint alleges that the State of Kansas was admitted into the Union on January 29, 1861, that the State of Colorado was admitted on August 1, 1876, and that the other defendants are corporations

organized, chartered and doing business in the State of Colorado; that the Arkansas River rises in the Rocky Mountains, in the State of Colorado, and, flowing in a southeasterly direction for a distance of about 280 miles, crosses the boundary into the State of Kansas; that the river then flows in an easterly and southeasterly direction through the State of Kansas for a distance of about 300 miles, then through Oklahoma, Indian Territory and Arkansas, on its way to the sea. Through the State of Kansas the Arkansas Valley is a level plain but a few feet above the normal level of the river, and is from two to twenty-five miles in width. Back to the foot hills on either side there are bottom lands which are saturated and sub-irrigated by the underflow from the river, and are fertile and productive almost beyond comparison. The Arkansas River is a meandered stream through the State of Kansas, and under the laws and departmental rules and regulations of the United States it is a navigable river through the State of Kansas, and was, in fact, navigable and navigated from the city of Wichita south to its mouth; and that the complainant is the owner of the bed of the stream between the meandered lines, in trust for the people of the State; that the complainant is the owner of two tracts of land bordering upon the river, one at Hutchinson and one at Dodge City, upon which State institutions are maintained—one as a reform school and the other as a soldiers' home. That when the State of Kansas was admitted into the Union it became the owner for school purposes of sections 16 and 36 of each Congressional township, of which the complainant still owns many thousand acres, much of which borders on the Arkansas River. That by act of Congress of March 3, 1863, the complainant became the owner of each odd-numbered section of land in the Arkansas Valley, and has since conveyed the whole of this land for the purposes specified. That by the year 1868 the land in the Arkansas Valley began to be taken by actual settlers, and by the year 1875 practically all the bottom lands in the east or lower half of the valley were entered and settled, and title obtained from the United States or the State of Kansas; and by the year 1882 the west or upper half of the valley was so entered and settled and like titles obtained. By the year 1873 a railroad was built through the entire length of the valley, and immediately after their settlement these bottom lands were extensively cultivated, large crops of agricultural products were raised, towns and cities sprang up, population rapidly increased, and by the year 1883 practically all the bottom lands of the Arkansas Valley were in a state of successful and prosperous cultivation; that the waters of the Arkansas River furnished the foundation for this prosperity. These waters furnished a wholesome and ample supply for domestic purposes, for the watering of stock, for power for operating mills and factories, for saturating and sub-irrigating the bottom lands back to the uplands on either side of the river, so that crops thereon were not only bounteous but practically certain, and in the western portion of the valley these waters were appropriated and used for surface irrigation, to supplant the scanty rainfall in that region. That by reason of these uses of the waters of the Arkansas River, and the almost unvarying water level beneath these bottom lands being near the surface, the lands in the Arkansas Valley in the State of Kansas were of great and permanent value to the owners and settlers thereon, and those upon the tax rolls of the State of Kansas yielded a large and increasing revenue to the complainant for State purposes.

"That after the lands in the Arkansas Valley had been settled and raised to a high state of cultivation, all the bottom lands in the valley being riparian lands and directly affected by the presence and flow of the river, and after parts of the flow of the river had been used for manufacturing and milling purposes, and after the riparian lands had been largely and extensively irrigated in the valley of the river in the western portion of Kansas, and after portions of the land so belonging to the complainant had been sold and conveyed, the State of Colorado and other defendants began systematically appropriating and diverting the waters of the Arkansas River, in the State of Colorado, between Canon City and the Kansas State line, for the purpose of irrigating dry, barren, arid, non-riparian and non-saturated lands lying on either side of the river, and often many miles therefrom, and by the year 1891 all the natural and normal waters and a large portion of the flood waters of the Arkansas River were so appropriated and diverted and actually applied to these dry, barren, arid, non-riparian and non-saturated lands in the State of Colorado, said diversions increasing from year to year, as their means of diversion became more complete and perfect, so the average flow of the river was greatly and permanently diminished and the normal flow of the river, exclusive of floods, was wholly and permanently destroyed, the navigability of the river where navigable before has been ruined, the power for manufacturing purposes greatly diminished, the surface of the underflow beneath the bottom lands has been lowered about five feet, and the water for the irrigation ditches in the western part of Kansas has been entirely cut off. The loss sustained by the complainant and its citizens has been great and incalculable. The benefits of river navigation are gone; the cheap water power has been replaced by the costly steam power; the productiveness and value of the bottom lands have been greatly diminished; the irrigation ditches are left dry and the lands uncultivated, and the revenues of the State of Kansas and its municipalities have been materially decreased. Against this loss and injury the complainant prays the assistance of this court."

In the brief of counsel for Colorado it is said:

"The contention of the defendant, State of Colorado, as to the facts, may be concisely stated as follows: The Arkansas River, popularly so called, is substantially two rivers, one a perennial stream rising in the mountains of Colorado and flowing down to the plains, and this *Colorado* Arkansas, when the river was permitted to run as it was accustomed to run, prior to the period of irrigation, poured into the sands of western Kansas, and at times of low water the river as a stream entirely disappeared. Its waters were to some extent evaporated, and as to the residue, were absorbed and swallowed up in the sands. So that from the vicinity of the State line between Kansas and Colorado on eastwardly, as far, at least, as Great Bend, if not farther, at such times of low water there was no flowing Arkansas River. Farther east, however, a new river arose, even at such times of low water, and partly from springs, partly from the drainage of the water table of the country supplied by rainfall, and partly from the surface drainage of an extensive territory, this river gradually again became a perennial stream, so that south of Wichita, and from there on to the mouth of the river, the *Kansas* Arkansas, as a new and separate stream, had a constant flow. Such, as the river was accustomed to flow, was the

Arkansas of the period prior to irrigation. It was a 'broken river.' It is true that at all times in early years, and now, the Arkansas River at times of flood, or of what might be called high water, has a continuous flow from its source to its mouth, but a flow, even in times of flood or high water, which diminishes through the sandy waste east of the Colorado State line above described, so that oftentimes even a flood in Colorado would be completely lost before it had passed over this arid stretch of sandy channel, and high water would always be diminished in flow through the same stretch of country. This river is as if it were a current of water passing over a sieve; if the current be slow and the volume not excessive, all of it sinks through the sieve and none passes on beyond; when the current is rapid and the volume is large, still a large amount sinks in the sieve, and the residue passes on beyond.

"Now, the irrigators of Colorado have confined their actions to the *Colorado* Arkansas above described. They have taken the waters of the perennial stream before it reaches this sieve, through which it wasted; they have lifted that stream out of the sandy channel in which it had flowed and applied it to beneficial uses upon the land; carried the body of it along at a higher level than where it was accustomed to run, and they finally restore it, practically undiminished in volume, so far as regards practical use, at points in the ancient channel farther east than the river at low water was accustomed to flow before the period of irrigation. The effect of the diversion of this water in Colorado, the carrying of it forward on a higher level, the return of waters, partly through seepage and partly through direct delivery at waste gates, and the effect of this process in extending eastward the perennial flow, will be fully discussed in the course of the argument to follow. It is sufficient in this preliminary statement to say that it is admitted by the complainant that in the course of a twelvemonth there is a vast amount of high and flood waters of the Arkansas that are never captured by man, that are of no use, but are rather of injury to Kansas riparian proprietors, and, so far as any beneficial use is concerned, are absolutely wasted and lost. Kansas does not claim that she has not abundance of water in times of flood or in times of high water; her complaint is based upon the alleged fact that she does not have what she was accustomed to have in periods of low water, whereas, in fact, as contended by the State of Colorado, the diversion of water in Colorado into ditches and reservoirs, continuing, as it does, throughout the year, in times of flood and in times of high water, has the effect, through seepage and return waters, to give perennial vitality to portions of this stream during what would otherwise be periods of depression or suspension of flow."

The substance of the petition in intervention is thus stated by counsel for the Government:

"The first paragraph of the said petition describes the Arkansas River from its source to its mouth, and alleges that it is not navigable in the States of Colorado and Kansas nor the Territory of Oklahoma, but is navigable in the State of Arkansas and the Indian Territory.

"In the second paragraph it is alleged that the lands located within the watershed of the river west of the ninety-ninth degree of longitude are arid lands.

"The third paragraph alleges that within said watershed there are 1,000,000 acres of public lands that are uninhabitable and unsalable.

"The fourth paragraph alleges that said lands can only be made habitable, productive, and salable by impounding and storing flood and other waters in said watershed to the end that the said waters may be used to reclaim said land.

"The fifth paragraph alleges that there is not sufficient moisture from rainfall to render the soil capable of producing crops in paying quantities in the watershed so described, and that they can only be made to produce crops by irrigation; that the common-law doctrine of riparian rights is not applicable to conditions in the arid region and has been abolished by statute and by usage and custom; that there has been established in its stead in said region a doctrine to the effect that the waters of natural streams and the flood and other waters may be impounded, appropriated, diverted, and used for the purpose of reclaiming and irrigating the arid land therein, and that the prior appropriation of such waters for such purpose gives a prior and superior right to the water of the stream.

"The sixth paragraph alleges that legislation of Congress, decisions of courts, and acts of the executive department have sanctioned and approved the use of water for irrigation purposes in the arid region and that he who is prior in time is prior in right, and that it is recognized that the common-law doctrine of riparian rights is not applicable to the public land owned by the United States in the arid region.

"The seventh paragraph alleges that in accordance with and in reliance upon the doctrine of the use of water for irrigation purposes the inhabitants of the arid portion of the United States have appropriated and used the waters of streams therein to reclaim and make productive and profitable about 10,000,000 acres of land, which now support a population of many millions, and that the inhabitants of Colorado and Kansas within the watershed of the Arkansas River have by irrigation from said river made productive and profitable about 200,000 acres of land, which provide homes for and support a population of many thousands.

"The eighth paragraph alleges that the common-law doctrine of riparian rights is not applicable to riparian lands within the arid region, and that only by the use of waters of natural streams and flood waters for irrigation and other beneficial purposes can the lands in the arid region be made productive, and only by such use can additional areas be reclaimed and rendered productive and salable.

"The ninth paragraph recites the passage of the so-called reclamation act of June 17, 1902.

"The tenth paragraph alleges that about 60,000,000 acres of land belonging to the United States within the arid region can be reclaimed under the provisions of the so-called reclamation act.

"The eleventh paragraph alleges that the amount of land that can be so reclaimed will support a population of many millions.

"The twelfth paragraph alleges that under the operation of the said reclamation act 100,000 acres of public land can be reclaimed within the watershed of the Arkansas River west of the ninety-ninth degree west.

"The thirteenth paragraph alleges that the lands when so reclaimed will support a population of not less than 50,000.

"The fourteenth paragraph alleges that under the operation of the so-called reclamation act about $1,000,000 has been expended in exploring, procuring, and setting apart sites upon which reservoirs and dams contemplated by the act can be constructed and maintained; that contracts have been let for the construction of reservoirs, which, when completed, will cost over two millions and will have a storage capacity to reclaim 500,000 acres of arid land, which land when reclaimed will sustain a population of not less than 250,000; that plans are contemplated for the expenditure of $20,000,000 under said act, to irrigate about 1,000,000 acres of arid public lands.

"The fifteenth paragraph recites that there are $16,000,000 available under the so-called reclamation act.

"The sixteenth paragraph sets forth the contention of Kansas as seen in its amended bill of complaint, viz., that it is entitled to have the waters of the Arkansas River, which rises in Colorado, flow uninterrupted and unimpeded into Kansas.

"The seventeenth paragraph sets forth the contention of Colorado in respect to its claim of ownership, viz., that under the provisions of its constitution it is the owner of all waters within that State.

"The eighteenth paragraph is as follows:

'That neither the contention of the State of Colorado nor the contention of the State of Kansas is correct; nor does either contention accord with the doctrine prevailing in the arid region in respect to the waters of natural streams and of flood and other waters. That either contention, if sustained, would defeat the object, intent, and purpose of the reclamation act, prevent the settlement and sale of the arid lands belonging to the United States, and especially those within the watershed of the Arkansas River west of the ninety-ninth degree west longitude, and would otherwise work great damage to the interests of the United States.'"

Mr. Justice BREWER delivered the opinion of the Court.

While we said in overruling the demurrer that "this court, speaking broadly, has jurisdiction," we contemplated further consideration of both the fact and the extent of our jurisdiction, to be fully determined after the facts were presented. We therefore commence with this inquiry. And first of our jurisdiction of the controversy between Kansas and Colorado.

This suit involves no question of boundary or of the limits of territorial jurisdiction. Other and incorporeal rights are claimed by the respective litigants. Controversies between the States are becoming frequent, and in the rapidly changing conditions of life and business are likely to become still more so. Involving as they do the rights of political communities, which in many respects are sovereign and independent, they present not infrequently questions of far-reaching import and of exceeding difficulty.

It is well, therefore, to consider the foundations of our jurisdiction over controversies between States. It is no longer open to question that by the Constitution a nation was brought into being, and that that instrument was not merely operative to establish a closer union or league of States. What-

ever powers of government were granted to the nation or reserved to the States (and for the description and limitation of those powers we must always accept the Constitution as alone and absolutely controlling), there was created a nation to be known as the United States of America, and as such then assumed its place among the nations of the world.

The first resolution passed by the convention that framed the Constitution, sitting as a committee of the whole, was "Resolved, That it is the opinion of this committee that a national government ought to be established, consisting of a supreme legislative, judiciary, and executive." 1 Eliot's Debates, p. 151.

In *M'Culloch* v. *State of Maryland*, 4 Wheat. 316, 405, Chief Justice Marshall said:

"The government of the Union, then, (whatever may be the influence of this fact on the case) is, emphatically and truly, a government of the people. In form and in substance it emanates from them. Its powers are granted by them, and are to be exercised directly on them, and for their benefit."

See also *Martin* v. *Hunter's Lessee*, 1 Wheat. 304, 324, opinion by Mr. Justice Story.

In *Dred Scott* v. *Sandford*, 19 How. 393, 441, Chief Justice Taney observed:

"The new government was not a mere change in a dynasty, or in a form of government, leaving the nation or sovereignty the same, and clothed with all the rights, and bound by all the obligations of the preceding one. But, when the present United States came into existence under the new government, it was a new political body, a new nation, then for the first time taking its place in the family of nations."

And in Miller on the Constitution of the United States, p. 83, referring to the adoption of the Constitution, that learned jurist said: "It was then that a nation was born."

In the Constitution are provisions in separate articles for the three great departments of government—legislative, executive and judicial. But there is this significant difference in the grants of powers to these departments: The first article, treating of legislative powers, does not make a general grant of legislative power. It reads: "Article I, Section 1. All legislative powers herein granted shall be vested in a Congress," etc.; and then in article 8 mentions and defines the legislative powers that are granted. By reason of the fact that there is no general grant of legislative power it has become an accepted constitutional rule that this is a government of enumerated powers.

In *M'Culloch* v. *State of Maryland*, *supra*, p. 405, Chief Justice Marshall said:

"This government is acknowledged by all to be one of enumerated powers. The principle, that it can exercise only the powers granted to it, would seem too apparent to have required to be enforced by all those arguments which its enlightened friends, while it was depending before the people, found it necessary to urge. That principle is now universally admitted."

On the other hand, in article III, which treats of the judicial department—and this is important for our present consideration—we find that section 1 reads that "the judicial power of the United States, shall be vested in one Supreme Court, and in such inferior courts as the Congress may from time to time ordain and establish." By this is granted the entire judicial power of the nation. Section 2, which provides that "the judicial power shall extend to all cases, in law and equity, arising under this Constitution, the laws of the United States," etc., is not a limitation nor an enumeration. It is a definite declaration, a provision that the judicial power shall extend to—that is, shall include—the several matters particularly mentioned, leaving unrestricted the general grant of the entire judicial power. There may be, of course, limitations on that grant of power, but if there are any they must be expressed, for otherwise the general grant would vest in the courts all the judicial power which the new nation was capable of exercising. Construing this article in the early case of *Chisholm* v. *Georgia*, 2 Dall. 419, the court held that the judicial power of the Supreme Court extended to a suit brought against a State by a citizen of another State. In announcing his opinion in the case, Mr. Justice Wilson said (p. 453):

"This question, important in itself, will depend on others more important still; and may, perhaps, be ultimately resolved into one no less radical than this—Do the people of the United States form a nation?"

In reference to this question attention may however properly be called to *Hans* v. *Louisiana*, 134 U. S. 1.

The decision in *Chisholm* v. *Georgia* led to the adoption of the Eleventh Amendment to the Constitution, withdrawing from the judicial power of the United States every suit in law or equity commenced or prosecuted against one of the United States by citizens of another State or citizens or subjects of a foreign state. This amendment refers only to suits and actions by individuals, leaving undisturbed the jurisdiction over suits or actions by one State against another. As said by Chief Justice Marshall in *Cohens* v. *Virginia*, 6 Wheat. 264, 407: "The amendment, therefore, extended to suits commenced or prosecuted by individuals, but not to those brought by States." See also *South Dakota* v. *North Carolina*, 192 U. S. 286.

Speaking generally, it may be observed that the judicial power of a nation extends to all controversies justiciable in their nature, the parties to which or the property involved in which may be reached by judicial

process, and when the judicial power of the United States was vested in the Supreme and other courts all the judicial power which the nation was capable of exercising was vested in those tribunals, and unless there be some limitations expressed in the Constitution it must be held to embrace all controversies of a justiciable nature arising within the territorial limits of the nation, no matter who may be the parties thereto. This general truth is not inconsistent with the decisions that no suit or action can be maintained against the nation in any of its courts without its consent, for they only recognize the obvious truth that a nation is not without its consent subject to the controlling action of any of its instrumentalities or agencies. The creature cannot rule the creator. *Kawananakoa* v. *Polyblank, Trustee, &c.* 205 U. S. . Nor is it inconsistent with the ruling in *Wisconsin* v. *Pelican Insurance Company*, 127 U. S. 265, that an original action cannot be maintained in this court by one State to enforce its penal laws against a citizen of another State. That was no denial of the jurisdiction of the court, but a decision upon the merits of the claim of the State.

These considerations lead to the propositions that when a legislative power is claimed for the national government the question is whether the that power is one of those granted by the Constitution, either in terms or by necessary implication, whereas in respect to judicial functions the question is whether there be any limitations expressed in the Constitution on the general grant of national power.

We may also notice a matter in respect thereto referred to at length in *Missouri* v. *Illinois & Chicago District*, 180 U. S. 208, 220. The ninth article of the Articles of Confederation provided that "the United States in Congress assembled shall also be the last resort on appeal in all disputes and differences now subsisting or that hereafter may arise between two or more States concerning boundary, jurisdiction or any other cause whatever." In the early drafts of the Constitution provision was made giving to the Supreme Court "jurisdiction of controversies between two or more States, except such as shall regard territory or jurisdiction," and also that the Senate should have exclusive power to regulate the manner of deciding the disputes and controversies between the States respecting jurisdiction or territory. As finally adopted, the Constitution omits all provisions for the Senate taking cognizance of disputes between the States and leaves out the exception referred to in the jurisdiction granted to the Supreme Court. That carries with it a very direct recognition of the fact that to the Supreme Court is granted jurisdiction of all controversies between the States which are justiciable in their nature. "All the States have transferred the decision of their controversies to this court; each had a right to demand of it the exercise of the power which they had made judicial by the Confederation of 1781 and 1788; that we should do that

which neither States nor Congress could do, settle the controversies between them." *Rhode Island* v. *Massachusetts*, 12 Pet. 657, 743.

Under the same general grant of judicial power jurisdiction over suits brought by the United States has been sustained. *United States* v. *Texas*, 143 U. S. 621; 162 U. S. 1; *United States* v. *Michigan*, 190 U. S. 379.

The exemption of the United States to suit in one of its own courts without its consent has been repeatedly recognized. *Kansas* v. *United States*, 204 U. S. 331, 341, and cases cited.

Turning now to the controversy as here presented, it is whether Kansas has a right to the continuous flow of the waters of the Arkansas River, as that flow existed before any human interference therewith, or Colorado the right to appropriate the waters of that stream so as to prevent that continuous flow, or that the amount of the flow is subject to the superior authority and supervisory control of the United States. While several of the defendant corporations have answered, it is unnecessary to specially consider their defenses, for if the case against Colorado fails it fails also as against them. Colorado denies that it is in any substantial manner diminishing the flow of the Arkansas River into Kansas. If that be true then it is in no way infringing upon the rights of Kansas. If it is diminishing that flow has it an absolute right to determine for itself the extent to which it will diminish it, even to the entire appropriation of the water? And if it has not that absolute right is the amount of appropriation that it is now making such an infringement upon the rights of Kansas as to call for judicial interference? Is the question one solely between the States or is the matter subject to national legislative regulation, and, if the latter, to what extent has that regulation been carried? Clearly this controversy is one of a justiciable nature. The right to the flow of a stream was one recognized at common law, for a trespass upon which a cause of action existed.

The primary question is, of course, of national control. For, if the nation has a right to regulate the flow of the waters, we must inquire what it has done in the way of regulation. If it has done nothing the further question will then arise, what are the respective rights of the two States in the absence of national regulation? Congress has, by virtue of the grant to it of power to regulate commerce "among the several States," extensive control over the highways, natural or artificial, upon which such commerce may be carried. It may prevent or remove obstructions in the natural waterways and preserve the navigability of those ways. In *United States* v. *Rio Grande Irrigation Company*, 174 U. S. 690, in which was considered the validity of the appropriation of the water of a stream by virtue of local legislation, so far as such appropriation affected the navigability of the stream, we said (p. 703):

"Although this power of changing the common law rule as to streams within its dominion undoubtedly belongs to each State, yet two limitations must be recognized: First, that in the absence of specific authority from Congress a State cannot by its legislation destroy the right of the United States, as the owner of lands bordering on a stream, to the continued flow of its waters; so far, at least, as may be necessary for the beneficial uses of the Government property. Second, that it is limited by the superior power of the General Government to secure the uninterrupted navigability of all navigable streams within the limits of the United States. In other words, the jurisdiction of the General Government over interstate commerce and its natural highways vests in that Government the right to take all needed measures to preserve the navigability of the navigable watercourses of the country, even against any State action."

It follows from this that if in the present case the national government was asserting, as against either Kansas or Colorado, that the appropriation for the purposes of irrigation of the waters of the Arkansas was affecting the navigability of the stream, it would become our duty to determine the truth of the charge. But the Government makes no such contention. On the contrary, it distinctly asserts that the Arkansas River is not now and never was practically navigable beyond Fort Gibson in the Indian Territory, and nowhere claims that any appropriation of the waters by Kansas or Colorado affects its navigability.

It rests its petition of intervention upon its alleged duty of legislating for the reclamation of arid lands; alleges that in or near the Arkansas River, as it runs through Kansas and Colorado, are large tracts of those lands; that the national government is itself the owner of many thousands of acres; that it has the right to make such legislative provision as in its judgment is needful for the reclamation of all these arid lands and for that purpose to appropriate the accessible waters.

In support of the main proposition it is stated in the brief of its counsel:

"That the doctrine of riparian rights is inapplicable to conditions prevailing in the arid region; that such doctrine, if applicable in said region, would prevent the sale, reclamation, and cultivation of the public arid lands, and defeat the policy of the Government in respect thereto; that the doctrine which is applicable to conditions in said arid region, and which prevails therein, is that the waters of natural streams may be used to irrigate and cultivate arid lands, whether riparian or non-riparian, and that the priority of appropriation of such waters and the application of the same for beneficial purposes establishes a prior and superior right."

In other words, the determination of the rights of the two States *inter sese* in regard to the flow of waters in the Arkansas River is subordinate to a superior right on the part of the national government to control the whole system of the reclamation of arid lands. That involves the question whether the reclamation of arid lands is one of the powers granted to the General Government. As heretofore stated, the constant declaration of

this court from the beginning is that this Government is one of enumerated powers. "The Government, then, of the United States can claim no powers which are not granted to it by the Constitution, and the powers actually granted must be such as are expressly given or given by necessary implication." (Story, J., in *Martin* v. *Hunter's Lessee*, 1 Wheat. 304, 326.) "The Government of the United States is one of delegated, limited, and enumerated powers." (*United States* v. *Harris*, 106 U. S. 629, 635.)

Turning to the enumeration of the powers granted to Congress by the eighth section of the first article of the Constitution, it is enough to say that no one of them by any implication refers to the reclamation of arid lands. The last paragraph of the section which authorizes Congress to make all laws which shall be necessary and proper for carrying into execution the foregoing powers, and all other powers vested by this Constitution in the government of the United States, or in any department or officer thereof, is not the delegation of a new and independent power, but simply provision for making effective the powers theretofore mentioned. The construction of that paragraph was precisely stated by Chief Justice Marshall in these words: "We think the sound construction of the Constitution must allow to the national legislature that discretion, with respect to the means by which the powers it confers are to be carried into execution, which will enable that body to perform the high duties assigned to it, in the manner most beneficial to the people. Let the end be legitimate, let it be within the scope of the Constitution, and all means which are appropriate, which are plainly adapted to that end, which are not prohibited, but consist with the letter and spirit of the Constitution, are constitutional"—a statement which has become the settled rule of construction. From this and other declarations it is clear that the Constitution is not to be construed technically and narrowly, as an indictment, or even as a grant presumably against the interest of the grantor, and passing only that which is clearly included within its language, but as creating a system of government whose provisions are designed to make effective and operative all the governmental powers granted. Yet while so construed it still is true that no independent and unmentioned power passes to the national government or can rightfully be exercised by the Congress.

We must look beyond section 8 for Congressional authority over arid lands, and it is said to be found in the second paragraph of section 3 of article four, reading: "The Congress shall have power to dispose of and make all needful rules and regulations respecting the territory or other property belonging to the United States; and nothing in this Constitution shall be so construed as to prejudice any claims of the United States, or of any particular State."

The full scope of this paragraph has never been definitely settled. Primarily, at least, it is a grant of power to the United States of control over its property. That is implied by the words "territory or other property." It is true it has been referred to in some decisions as granting political and legislative control over the Territories as distinguished from the States of the Union. It is unnecessary in the present case to consider whether the language justifies this construction. Certainly we have no disposition to limit or qualify the expressions which have heretofore fallen from this court in respect thereto. But clearly it does not grant to Congress any legislative control over the States, and must, so far as they are concerned, be limited to authority over the property belonging to the United States within their limits. Appreciating the force of this, counsel for the Government relies upon "the doctrine of sovereign and inherent power," adding "I am aware that in advancing this doctrine I seem to challenge great decisions of the court, and I speak with deference." His argument runs substantially along this line: All legislative power must be vested in either the State or the national government; no legislative powers belong to a State government other than those which affect solely the internal affairs of that State; consequently all powers which are national in their scope must be found vested in the Congress of the United States. But the proposition that there are legislative powers affecting the nation as a whole which belong to, although not expressed in the grant of powers, is in direct conflict with the doctrine that this is a government of enumerated powers. That this is such a government clearly appears from the Constitution, independently of the amendments, for otherwise there would be an instrument granting certain specified things made operative to grant other and distinct things. This natural construction of the original body of the Constitution is made absolutely certain by the Tenth Amendment. This amendment, which was seemingly adopted with prescience of just such contention as the present, disclosed the widespread fear that the national government might, under the pressure of a supposed general welfare, attempt to exercise powers which had not been granted. With equal determination the framers intended that no such assumption should ever find justification in the organic act, and that if in the future further powers seemed necessary they should be granted by the people in the manner they had provided for amending that act. It reads: "The powers not delegated to the United States by the Constitution, nor prohibited by it to the States, are reserved to the States respectively, or to the people." The argument of counsel ignores the principal factor in this article, to wit, "the people." Its principal purpose was not the distribution of power between the United States and the States, but a reservation to the people of all powers not granted. The preamble of the Constitution declares who framed it, "we the people of the United States," not the people of one State,

but the people of all the States, and article 10 reserves to the people of all the States the powers not delegated to the United States. The powers affecting the internal affairs of the States not granted to the United States by the Constitution, nor prohibited by it to the States, are reserved to the States respectively, and all powers of a national character which are not delegated to the national government by the Constitution are reserved to the people of the United States. The people who adopted the Constitution knew that in the nature of things they could not foresee all the questions which might arise in the future, all the circumstances which might call for the exercise of further national powers than those granted to the United States, and after making provision for an amendment to the Constitution by which any needed additional powers would be granted, they reserved to themselves all powers not so delegated. This article 10 is not to be shorn of its meaning by any narrow or technical construction, but is to be considered fairly and liberally so as to give effect to its scope and meaning. As we said, construing an express limitation on the powers of Congress, in *Fairbank* v. *United States*, 181 U. S. 283, 288:

"We are not here confronted with a question of the extent of the powers of Congress, but one of the limitations imposed by the Constitution on its action, and it seems to us clear that the same rule and spirit of construction must also be recognized. If powers granted are to be taken as broadly granted and as carrying with them authority to pass those acts which may be reasonably necessary to carry them into full execution; in other words, if the Constitution in its grant of powers is to be so construed that Congress shall be able to carry into full effect the powers granted, it is equally imperative that where prohibition or limitation is placed upon the power of Congress, that prohibition or limitation should be enforced in its spirit and to its entirety. It would be a strange rule of construction that language granting powers is to be liberally construed, and that language of restriction is to be narrowly and technically construed. Especially is this true when in respect to grants of powers there is as heretofore noticed the help found in the last clause of the eighth section, and no such helping clause in respect to prohibitions and limitations. The true spirit of constitutional interpretation in both directions is to give full, liberal construction to the language, aiming ever to show fidelity to the spirit and purpose."

This very matter of the reclamation of arid lands illustrates this: At the time of the adoption of the Constitution within the known and conceded limits of the United States there were no large tracts of arid land, and nothing which called for any further action than that which might be taken by the legislature of the State, in which any particular tract of such land was to be found, and the Constitution, therefore, makes no provision for a national control of the arid regions or their reclamation. But, as our national territory has been enlarged, we have within our borders extensive tracts of arid lands which ought to be reclaimed, and it may well be that no power

is adequate for their reclamation other than that of the national government. But if no such power has been granted, none can be exercised.

It does not follow from this that the national government is entirely powerless in respect to this matter. These arid lands are largely within the Territories, and over them by virtue of the second paragraph of section three of article four heretofore quoted, or by virtue of the power vested in the national government to acquire territory by treaties, Congress has full power of legislation, subject to no restrictions other than those expressly named in the Constitution, and, therefore, it may legislate in respect to all arid lands within their limits. As to those lands within the limits of the States, at least of the Western States, the national government is the most considerable owner and has power to dispose of and make all needful rules and regulations respecting its property. We do not mean that its legislation can override State laws in respect to the general subject of reclamation. While arid lands are to be found, mainly if not only in the Western and newer States, yet the powers of the national government within the limits of those States are the same (no greater and no less) than those within the limits of the original thirteen, and it would be strange if, in the absence of a definite grant of power, the national government could enter the terrritory of the States along the Atlantic and legislate in respect to improving by irrigation or otherwise the lands within their borders. Nor do we understand that hitherto Congress has acted in disregard to this limitation. As said by Mr. Justice White, delivering the opinion of the court in *Gutierres* v. *Albuquerque Land Company*, 188 U. S. 545, 554, after referring to previous legislation:

"It may be observed that the purport of the previous acts is reflexively illustrated by the act of June 17, 1902, 32 Stat. 388. That act appropriated the receipts from the sale and disposal of the public lands in certain States and Territories to the construction of irrigation works for the reclamation of arid lands. The eighth section of the act is as follows:

'SEC. 8. That nothing in this act shall be construed as affecting or intending to affect or to in any way interfere with the laws of any State or Territory relating to the control, appropriation, use, or distribution of water used in irrigation, or any vested right acquired thereunder, and the Secretary of the Interior, in carrying out the provisions of this act, shall proceed in conformity with such laws, and nothing herein shall in any way affect any right of any State or of the Federal government or of any landowner, appropriator, or user of water in, to, or from any interstate stream or the waters thereof: Provided, That the right to the use of the water acquired under the provisions of this act shall be appurtenant to the land irrigated, and beneficial use shall be the basis, the measure, and the limit of the right.'"

But it is useless to pursue the inquiry further in this direction. It is enough for the purposes of this case that each State has full jurisdiction over the lands within its borders, including the beds of streams and other

waters. *Martin* v. *Waddell*, 16 Pet. 367; *Pollard* v. *Hagan*, 3 How. 212; *Goodtitle* v. *Kibbe*, 9 How. 471; *Barney* v. *Keokuk*, 94 U. S. 324; *St. Louis* v. *Myers*, 113 U.S. 566; *Packer* v. *Bird*, 137 U. S. 661; *Hardin* v. *Jordan*, 140 U. S. 371; *Kaukauna Water Power Company* v. *Green Bay & Mississippi Canal Company*, 142 U. S. 254; *Shively* v. *Bowlby*, 152 U. S. 1; *Water Power Company* v. *Water Commissioners*, 168 U. S. 349; *Kean* v. *Calumet Canal Company*, 190 U. S. 452. In *Barney* v. *Keokuk*, *supra*, Mr. Justice Bradley said (p. 338):

"And since this court, in the case of *The Genesee Chief*, 12 Id. 443, has declared that the Great Lakes and other navigable waters of the country, above as well as below the flow of the tide, are, in the strictest sense, entitled to the denomination of navigable waters, and amenable to the admiralty jurisdiction, there seems to be no sound reasons for adhering to the old rule as to the proprietorship of the beds and shores of such waters. It properly belongs to the States by their inherent sovereignty, and the United States has wisely abstained from extending (if it could extend) its survey and grants beyond the limits of high water."

In *Hardin* v. *Jordan*, *supra*, the same justice, after stating that the title to the shore and lands under water is in the State, added (pp. 381 382):

"Such title being in the State, the lands are subject to State regulation and control, under the condition, however, of not interfering with the regulations which may be made by Congress with regard to public navigation and commerce. . . . Sometimes large areas so reclaimed are occupied by cities, and are put to other public or private uses, State control and ownership therein being supreme, subject only to the paramount authority of Congress in making regulations of commerce, and in subjecting the lands to the necessities and uses of commerce. . . . This right of the States to regulate and control the shores of tide waters, and the land under them, is the same as that which is exercised by the Crown in England. In this country the same rule has been extended to our great navigable lakes, which are treated as inland seas; and also, in some of the States, to navigable rivers, as the Mississippi, the Missouri, the Ohio, and, in Pennsylvania, to all the permanent rivers of the State; but it depends on the law of each State to what waters and to what extent this prerogative of the State over the lands under water shall be exercised."

It may determine for itself whether the common law rule in respect to riparian rights or that doctrine which obtains in the arid regions of the West of the appropriation of waters for the purposes of irrigation shall control. Congress cannot enforce either rule upon any State. It is undoubtedly true that the early settlers brought to this country the common law of England, and that that common law throws light on the meaning and scope of the Constitution of the United States, and is also in many States expressly recognized as of controlling force in the absence of express statute. As said by Mr. Justice Gray in *United States* v. *Wong Kim Ark*, 169 U. S. 649, 654:

"In this, as in other respects, it must be interpreted in the light of the common law, the principles and history of which were familiarly known to the framers of the Constitution. *Minor* v. *Happersett*, 21 Wall. 162; *Ex parte Wilson*, 114 U. S. 417, 422; *Boyd* v. *United States*, 116 U. S. 616, 624, 625; *Smith* v. *Alabama*, 124 U. S. 465. The language of the Constitution, as has been well said, could not be understood without reference to the common law. 1 Kent Com. 336; Bradley, J., in *Moore* v. *United States*, 91 U. S. 270, 274."

In the argument on the demurrer counsel for plaintiff endeavored to show that Congress had expressly imposed the common law on all this territory prior to its formation into States. See also the opinion of the Supreme Court of Kansas in *Clark* v. *Allaman*, 71 Kan. 206. But when the States of Kansas and Colorado were admitted into the Union they were admitted with the full powers of local sovereignty which belonged to other States, *Pollard* v. *Hagan*, *supra*; *Shively* v. *Bowlby*, *supra*; *Hardin* v. *Shedd*, 190 U. S. 508, 519, and Colorado by its legislation has recognized the right of appropriating the flowing waters to the purposes of irrigation. Now the question arises between two States, one recognizing generally the common law rule of riparian rights and the other prescribing the doctrine of the public ownership of flowing water. Neither State can legislate for or impose its own policy upon the other. A stream flows through the two and a controversy is presented as to the flow of that stream. It does not follow, however, that because Congress cannot determine the rule which shall control between the two States or because neither State can enforce its own policy upon the other, that the controversy ceases to be one of a justiciable nature, or that there is no power which can take cognizance of the controversy and determine the relative rights of the two States. Indeed, the disagreement, coupled with its effect upon a stream passing through the two States, makes a matter for investigation and determination by this court. It has been said that there is no common law of the United States as distinguished from the common law of the several States. This contention was made in *Western Union Telegraph Company* v. *Call Publishing Company*, 181 U. S. 92, in which it was asserted that, as Congress having sole jurisdiction over interstate commerce had prescribed no rates for interstate telegraph communications, there was no limit on the power of a telegraph company in respect thereto. After referring to the general contention, we said (pp. 101, 102):

"Properly understood, no exceptions can be taken to declarations of this kind. There is no body of Federal common law separate and distinct from the common law existing in the several States in the sense that there is a body of statute law enacted by Congress separate and distinct from the body of statute law enacted by the several States. But it is an entirely different thing to hold that there is no common law in force generally throughout the United States, and that the countless multitude of interstate

commercial transactions are subject to no rules and burdened by no restrictions other than those expressed in the statutes of Congress. . . . Can it be that the great multitude of interstate commercial transactions are freed from the burdens created by the common law. as so defined, and are subject to no rule except that to be found in the statutes of Congress? We are clearly of opinion that this cannot be so, and that the principles of the common law are operative upon all interstate commercial transactions, except so far as they are modified by Congressional enactment."

What is the common law? Kent says (vol. 1, p. 471):

"The common law includes those principles, usages and rules of action applicable to the government and security of persons and property, which do not rest for their authority upon any express and positive declaration of the will of the legislature."

As it does not rest on any statute or other written declaration of the sovereign, there must, as to each principle thereof, be a first statement. Those statements are found in the decisions of courts, and the first statement presents the principle as certainly as the last. Multiplication of declarations merely adds certainty. For after all, the common law is but the accumulated expressions of the various judicial tribunals in their efforts to ascertain what is right and just between individuals in respect to private disputes. As Congress cannot make compacts between the States, as it cannot, in respect to certain matters, by legislation compel their separate action, disputes between them must be settled either by force or else by appeal to tribunals empowered to determine the right and wrong thereof. Force under our system of Government is eliminated. The clear language of the Constitution vests in this court the power to settle those disputes. We have exercised that power in a variety of instances, determining in the several instances the justice of the dispute. Nor is our jurisdiction ousted, even if, because Kansas and Colorado are States sovereign and independent in local matters, the relations between them depend in any respect upon principles of international law. International law is no alien in this tribunal. In *The Paquete Habana*, 175 U. S. 677, 700, Mr. Justice Gray declared:

"International law is part of our law, and must be ascertained and administered by the courts of justice of appropriate jurisdiction, as often as questions of right depending upon it are duly presented for their determination."

And in delivering the opinion in the demurrer in this case Chief Justice Fuller said (p. 146):

"Sitting, as it were, as an international, as well as a domestic tribunal, we apply Federal law, State law, and international law, as the exigencies of the particular case may demand."

One cardinal rule, underlying all the relations of the States to each other, is that of equality of right. Each State stands on the same level

with all the rest. It can impose its own legislation on no one of the others, and is bound to yield its own views to none. Yet, whenever, as in the case of *Missouri* v. *Illinois, supra*, the action of one State reaches through the agency of natural laws into the territory of another State, the question of the extent and the limitations of the rights of the two States becomes a matter of justiciable dispute between them, and this court is called upon to settle that dispute in such a way as will recognize the equal rights of both and at the same time establish justice between them. In other words, through these successive disputes and decisions this court is practically building up what may not improperly be called interstate common law. This very case presents a significant illustration. Before either Kansas or Colorado was settled the Arkansas River was a stream running through the territory which now composes these two States. Arid lands abound in Colorado. Reclamation is possible only by the application of water, and the extreme contention of Colorado is that it has a right to appropriate all the waters of this stream for the purposes of irrigating its soil and making more valuable its own territory. But the appropriation of the entire flow of the river would naturally tend to make the lands along the stream in Kansas less arable. It would be taking from the adjacent territory that which had been the customary natural means of preserving its arable character. On the other hand, the possible contention of Kansas, that the flowing water in the Arkansas must, in accordance with the extreme doctrine of the common law of England, be left to flow as it was wont to flow, no portion of it being appropriated in Colorado for the purposes of irrigation, would have the effect to perpetuate a desert condition in portions of Colorado beyond the power of reclamation. Surely here is a dispute of a justiciable nature which must and ought to be tried and determined. If the two States were absolutely independent nations it would be settled by treaty or by force. Neither of these ways being practicable, it must be settled by decision of this court.

It will be perceived that Kansas asserts a pecuniary interest as the owner of certain tracts along the banks of the Arkansas and as the owner of the bed of the stream. We need not stop to consider what rights such private ownership of property might give.

In deciding this case on demurrer we said, referring to the opinion in *Missouri* v. *Illinois* (p. 142):

"As will be perceived, the court there ruled that the mere fact that a State had no pecuniary interest in the controversy, would not defeat the original jurisdiction of this court, which might be invoked by the State as parens patriae, trustee, guardian or representative of all or a considerable portion of its citizens; and that the threatened pollution of the waters of a river flowing between States, under the authority of one of them,

thereby putting the health and comfort of the citizens of the other in jeopardy, presented a cause of action justiciable under the Constitution.

"In the case before us, the State of Kansas files her bill as representing and on behalf of her citizens, as well as in vindication of her alleged rights as an individual owner, and seeks relief in respect of being deprived of the waters of the river accustomed to flow through and across the State, and the consequent destruction of the property of herself and of her citizens and injury to their health and comfort. The action complained of is State action and not the action of State officers in abuse or excess of their powers."

It is the State of Kansas which invokes the action of this court, charging that through the action of Colorado a large portion of its territory is threatened with disaster. In this respect it is in no manner evading the provisions of the Eleventh Amendment to the Federal Constitution. It is not acting directly and solely for the benefit of any individual citizen to protect his riparian rights. Beyond its property rights it has an interest as a State in this large tract of land bordering on the Arkansas River. Its prosperity affects the general welfare of the State. The controversy rises, therefore, above a mere question of local private right and involves a matter of State interest, and must be considered from that standpoint. *Georgia* v. *Tennessee Copper Co., ante,* .

This changes in some respects the scope of our inquiry. It is not limited to the simple matter of whether any portion of the waters of the Arkansas is withheld by Colorado. We must consider the effect of what has been done upon the conditions in the respective States and so adjust the dispute upon the basis of equality of rights as to secure as far as possible to Colorado the benefits of irrigation without depriving Kansas of the like beneficial effects of a flowing stream. A little reflection will make this clear. Suppose the controversy was between two individuals, upper and lower riparian owners on a little stream with rocky bank and rocky bottom. The question properly might be limited to the single one of the diminution of the flow by the upper riparian proprietor. The lower riparian proprietor might insist that he was entitled to the full, undiminished and unpolluted flow of the water of the stream as it had been wont to run. It would not be a defense on the part of the upper riparian proprietor that by the use to which he had appropriated the water he had benefited the lower proprietor, or that the latter had received in any other respects an equivalent. The question would be one of legal right, narrowed to place, amount of flow and freedom from pollution.

We do not intimate that entirely different considerations obtain in a controversy between two States. Colorado could not be upheld in appropriating the entire flow of the Arkansas River, on the ground that it is willing to give, and does give, to Kansas something else which may be

considered of equal value. That would be equivalent to this court's making a contract between the two States, and that it is not authorized to do. But we are justified in looking at the question not narrowly and solely as to the amount of the flow in the channel of the Arkansas River, inquiring merely whether any portion thereof is appropriated by Colorado, but we may properly consider what, in case a portion of that flow is appropriated by Colorado, are the effects of such appropriation upon Kansas territory. For instance, if there be many thousands of acres in Colorado destitute of vegetation, which by the taking of water from the Arkansas River and in no other way can be made valuable as arable lands producing an abundance of vegetable growth, and this transformation of desert land has the effect, through percolation of water in the soil, or in any other way, of giving to Kansas territory, although not in the Arkansas Valley, a benefit from water as great as that which would enure by keeping the flow of the Arkansas in its channel undiminished, then we may rightfully regard the usefulness to Colorado as justifying its action, although the locality of the benefit which the flow of the Arkansas through Kansas has territorially changed. Science may not as yet be able to give positive information as to the processes by which the distribution of water over certain territory has operation beyond the mere limits of the area in which the water is distributed, but they who have dwelt in the West know that there are constant changes in the productiveness of different portions of the territory, owing, apparently, to a wider and more constant distribution of water. To illustrate, the early settlers of Kansas territory found that farming was unsuccessful unless confined to its eastern 100 or 120 miles. West of that crops were almost always a failure, but now that region is the home of a large population, with crops as certain as those elsewhere, and yet this change has not been brought about by irrigation. A common belief is that the original sod was largely impervious to water, that when the spring rains came the water, instead of sinking into the ground, filled the watercourses to overflowing and ran off to the Gulf of Mexico. There was no water in the soil to go up in vapor and come down in showers, and the constant heat of summer destroyed the crops; but after the sod had once been turned the water from those rains largely sank into the ground, and then as the summer came on went up in vapor and came down in showers, and so by continued watering prevented the burning up of the growing crops. We do not mean to say that science has demonstrated this to be the operating cause or that other theories are not propounded, but the fact is that, instead of stopping at a distance of 120 miles from the Missouri River, the area of cultivated and profitably cultivated land has extended 150 to 200 miles further west, and seems to be steadily moving towards the western boundary of the State. Now if

there is this change gradually moving westward from the Missouri River, is it altogether an unreasonable expectation that as the arid lands of Colorado are irrigated and become from year to year covered with vegetation, there will move eastward from Colorado an extension of the area of arable lands until, between the Missouri River and the mountains of Colorado, there shall be no land which is not as fully subject to cultivation as lands elsewhere in the country? Will not the productiveness of Kansas as a whole, its capacity to support an increasing population, be increased by the use of the water in Colorado for irrigation? May we not consider some appropriation by Colorado of the waters of the Arkansas to the irrigation and reclamation of its arid lands as a reasonable exercise of its sovereignty and as not unreasonably trespassing upon any rights of Kansas. And here we must notice the local law of Kansas as declared by its Supreme Court, premising that the views expressed in this opinion are to be confined to a case in which the facts and the local law of the two States are as here disclosed. In *Clark* v. *Allaman*, 71 Kan. 206, is an exhaustive discussion of the question, Mr. Justice Burch delivering the unanimous opinion of the court. In the syllabus, which by statute (Compiled Laws, Kansas, p. 317, sec. 14) is prepared by the justice writing the opinion, and states the law of the case, are these paragraphs:

"The use of the water of a running stream for irrigation, after its primary uses for quenching thirst and other domestic requirements have been subserved, is one of the common law rights of a riparian proprietor.

"The use of water by a riparian proprietor for irrigation purposes must be reasonable under all the circumstances, and the right must be exercised with due regard to the equal right of every other riparian owner along the course of the stream.

"A diminution of the flow of water over riparian land caused by its use for irrigation purposes by upper riparian proprietors occasions no injury for which damages may be allowed unless it results in subtracting from the value of the land by interfering with the reasonable uses of the water which the land owner is able to enjoy.

"In determining the quantity of land tributary to and lying along a stream which a single proprietor may irrigate the principle of equality of right with others should control, irrespective of the accidental matter of governmental subdivisions of the land."

And in the opinion, on pages 242, 243, are quoted these observations of Chief Justice Shaw in the case of *Elliott* v. *Fitchburg Railroad Company*, 10 Cush. 191, 193, 196:

"The right to flowing water is now well settled to be a right incident to property in the land; it is a right *publici juris*, of such a character, that whilst it is common and equal to all, through whose land it runs, and no one can obstruct or divert it, yet, as one of the beneficial gifts of Providence, each proprietor has a right to a just and reasonable use of it, as it passes through his land; and so long as it is not wholly obstructed or diverted, or no larger appropriation of the water running through it is made than

a just and reasonable use, it cannot be said to be wrongful or injurious to a proprietor lower down. What is such a just and reasonable use, may often be a difficult question, depending on various circumstances. To take a quantity of water from a large running stream for agriculture or manufacturing purposes, would cause no sensible or practicable diminution of the benefit, to the prejudice of a lower proprietor; whereas, taking the same quantity from a small running brook passing through many farms, would be of great and manifest injury to those below, who need it for domestic supply or watering cattle; and therefore it would be an unreasonable use of the water, and an action would lie in the latter case and not in the former. It is, therefore, to a considerable extent a question of degree; still, the rule is the same, that each proprietor has a right to a reasonable use of it, for his own benefit, for domestic use, and for manufacturing and agricultural purposes. . . .

"That a portion of the water of a stream may be used for the purpose of irrigating land, we think is well established as one of the rights of the proprietors of the soil along or through which it passes. Yet a proprietor cannot under color of that right, or for the actual purpose of irrigating his own land, wholly abstract or divert the watercourse, or take such an unreasonable quantity of water, or make such unreasonable use of it, as to deprive other proprietors of the substantial benefits which they might derive from it, if not diverted or used unreasonably. . . .

"This rule, that no riparian proprietor can wholly abstract or divert a watercourse, by which it would cease to be a running stream, or use it unreasonably in its passage, and thereby deprive a lower proprietor of a quality of his property, deemed in law incidental and beneficial, necessarily flows from the principle that the right to the reasonable and beneficial use of a running stream is common to all the riparian proprietors, and so, each is bound so to use his common right, as not essentially to prevent or interfere with an equally beneficial enjoyment of the common right, by all the proprietors. . . .

"The right to the use of flowing water is *publici juris*, and common to all the riparian proprietors; it is not an absolute and exclusive right to all the water flowing past their land, so that any obstruction would give a cause of action; but it is a right to the flow and enjoyment of the water, subject to a similar right in all the proprietors, to the reasonable enjoyment of the same gift of Providence. It is, therefore, only for an abstraction and deprivation of this common benefit, or for an unreasonable and unauthorized use of it, that an action will lie."

As Kansas thus recognizes the right of appropriating the waters of a stream for the purposes of irrigation, subject to the condition of an equitable division between the riparian proprietors, she cannot complain if the same rule is administered between herself and a sister State. And this is especially true when the waters are, except for domestic purposes, practically useful only for purposes of irrigation. The Arkansas River, from its source to the eastern end of the Royal Gorge, is a mountain torrent, coming down between rocky banks and over a rocky bed. Along this distance it is of comparatively little use for irrigation purposes. After it debouches from the Royal Gorge it enters a valley, in which it wanders

from one side to the other through eastern Colorado, southwestern Kansas and into Oklahoma, with but a slight descent, and presenting but little opportunities for the development of water power through falls or by dams. Its length in Kansas is about three hundred and fifty miles, and the descent is only 2,320 feet, or less than seven feet to a mile. There are substantially no falls, no narrow passageways in which dams can be readily constructed for the development of water power; and while there are some in eastern Colorado, yet they are of little elevation and mainly to assist in the storing of water for purposes of irrigation. So that, if the extreme rule of the common law were enforced, Oklahoma having the same right to insist that there should be no diversion of the stream in Kansas for the purposes of irrigation that Kansas has in respect to Colorado, the result would be that the waters, except for the meagre amount required for domestic purposes, would flow through eastern Colorado and Kansas of comparatively little advantage to either State, and both would lose the great benefit which comes from the use of the water for irrigation. The drainage area of the Arkansas River in Colorado is 26,000 square miles; in Kansas, 20,000 square miles; and all this area, unless the stream can be used for purposes of irrigation, would be left to the slow development which comes from the cultivation of the soil.

The testimony in this case is voluminous, amounting to 8,559 typewritten pages, with 122 exhibits, and it would be impossible to make a full statement of facts without an extravagant extension of this opinion, which is already too long, and yet some facts must be stated to indicate the basis for the conclusion to which we have come. It must also be noted that, as might be expected in such a volume of testimony, coming as it does from three hundred and forty-seven witnesses, there is no little contradiction and a good deal of confusion, and this contradiction is to be found not merely in the testimony of witnesses, but also in the exhibits, among which are reports from the officials of the Government and the two States. We have endeavored to deduce from this volume those matters which seem most clearly proved, and must, as to other matters, be content to generalize and state that which seems to be the tendency of the evidence.

Colorado is divided into five irrigating divisions, each of which is in charge of a division engineer. That which includes the drainage area of the Arkansas is District No. 2, divided into eleven districts. Under the laws of Colorado, irrigating ditches have been established in this district and the amount of water which each may take from the river decreed. In addition some reservoirs have been built for storing the surplus waters which come down in times of flood, and this adds largely to the amount available for irrigation. The storage capacity of six of these reservoirs is shown to be 8,527,673,652 cubic feet. The significance and value of these reservoirs can be appreciated when we remember that the Arkansas, like

many other streams, has its origin in the mountain districts of Colorado, and that by the melting of the snows almost every year there is a flood. The amount of water authorized to be taken by the ditches from the river is, as alleged in the bill, 4,200 cubic feet, and from its affluents and tributaries 4,300 feet. (Whenever this term is used in reference to the flow of water it means the number of cubic feet that pass in a second.) The average flow of the river as it comes out of the Royal Gorge at Canon City, is as shown by official measurements for a series of years, 750 cubic feet. So that it appears that the irrigating ditches are authorized to take from the Arkansas River much more water than passes in the channel into the valley. It is not clear what surplus water, if any, comes out of the tributaries. There are some twenty-five of them, the average flow from four of which into the Arkansas is 313 cubic feet. Aside from this surplus water some may be returned through overflow of the ditches or from seepage. What either of these amounts may be is not disclosed. Indeed, the extent to which seepage operates in adding to the flow of a stream, or in distributing water through lands adjacent to those upon which water is poured, is something proof of which must necessarily be almost impossible. We may note the fact that a tract, bordering upon land which has been flooded, shows by its increasing vegetation that it has received in some way the benefit of water, and yet the amount of the water passing by seepage may never be definitely known. The underground movement of water will always be a problem of uncertainty. We know that when water is turned upon dry and barren soil the barrenness disappears, vegetation is developed, and that which was a desert becomes a garden. It is the magic of transformation; the wilderness budding and blossoming as the rose. The writer of this opinion recalls a conversation with Bayard Taylor, the celebrated traveler, in which the latter stated that nothing had contributed so much to secure the steady control of the French in Algiers as the fact that after taking possession of that territory they sank artesian wells on the borders of the desert, and thus reclaimed portions of it, for the Arabs believed that people who could reclaim the desert were possessed of a power that could not be withstood.

Further, adjacent barren ground is slowly but surely affected, and itself begins to increase its vegetation. We may not be entirely sure as to the methods by which this change is accomplished, although the result is undoubted. It may be that water percolating under the surface has reached this adjacent ground. Perhaps the vegetation, which we know attracts moisture from the air, may increase the rainfall, and thus affect the adjacent barren regions.

It appears that prior to 1885 there was comparatively little water taken from the Arkansas for irrigation purposes—certainly not enough to make any perceptible impression on the flow of the river—but about that time

certain corporations commenced the work of irrigation on a large scale, with ditches some of which might well be called canals. Thus, in 1884 work was commenced on ditches capable of carrying off 450 cubic feet; in 1887 others capable of carrying off 1,481 cubic feet, and in 1890 still others carrying 1,705 cubic feet. Most of these were completed within two years after the commencement of the several works. By the year 1902, according to the report of the Census Bureau of the United States there were 300,115 acres, in 4,557 farms, actually irrigated.

The counties in Colorado from Canon City, eastward through which the Arkansas runs are Fremont, Pueblo, Otero, Bent and Prowers. The following tables prepared by the defendants from various census reports show the population, number of acres cultivated and total value of farm products in these several counties for the years 1880, 1890 and 1900:

County.	Population.		
	1880.	1890.	1900.
Fremont	4,735	9,156	15,636
Pueblo	7,617	31,491	34,448
Otero	.....	4,192	11,522
Bent	1,654	1,313	3,049
Prowers	.....	1,969	3,766
Making in the aggregate	14,006	48,121	68,421

County.	No. of acres cultivated.			Value of Farm Products.		
	1880.	1890.	1900.	1880.	1890.	1900.
Fremont	16,160	52,868	109,488	$ 76,900	$237,980	$ 472,293
Pueblo	51,894	100,697	478,821	136,184	244,580	691,693
Otero	.....	61,347	244,594	.....	208,860	1,089,344
Bent	30,921	30,058	118,485	105,621	35,070	670,541
Prowers	.....	46,447	217,332	.....	60,500	465,688
	98,975	291,417	1,168,720	$318,705	$786,990	$3,389,559

These tables disclose a very marked development in the population, area of land cultivated and amount of agricultural products. Whatever has been effective in bringing about this development is certainly entitled to recognition, and should not be wantonly or unnecessarily destroyed or interfered with. That this development is largely owing to irrigation is

something of which from a consideration of the testimony there can be no reasonable doubt. It has been a prime factor in securing this result, and before at the instance of a sister State this effective cause of Colorado's development is destroyed or materially interfered with it should be clear that such sister State has not merely some technical right, but also a right with a corresponding benefit.

It may be asked why cultivation in Colorado without irrigation may not have the same effect that has attended the cultivation in Kansas west of where it was productive when the territory was first settled. It may possibly have such effect to some degree, but it must be remembered that the land in Colorado is many hundred feet in elevation above that in Kansas; that large portions of it are absolutely destitute of sod, and that cultivation would have comparatively little effect upon the retention of water. Add further the fact that the rainfall in Colorado is less than that in Kansas, and it would seem almost certain that reliance upon mere cultivation of the soil would not have anything like the effect in Colorado that it has had in Kansas, and that the barrenness which characterized portions of the territory of Colorado would have continued for an indefinite time unless relieved by irrigation.

Turning to Kansas, the counties along the Arkansas River, commencing from the Colorado line are: Hamilton, Kearney, Finney, Gray, Ford, Edwards, Pawnee, Barton, Rice, Reno, Sedgwick, Sumner, Cowley. Taking the same years as are given for the Colorado counties, the population is shown to be:

County.	Population.		
	1880.	1890.	1900.
Hamilton	168	2,027	1,426
Kearney	159	1,571	1,107
Finney	.....	3,350	3,469
Gray	.....	2,415	1,264
Ford	3,122	5,308	5,497
Edwards	2,409	3,600	3,682
Pawnee	5,396	5,204	5,084
Barton	10,318	13,172	13,784
Rice	9,292	14,451	14,745
Reno	12,826	27,079	29,027
Sedgwick	18,753	43,626	44,037
Sumner	20,812	30,271	25,631
Cowley	21,538	34,478	30,156
	104,793	186,552	178,909

We have been furnished by the United States Census Office with statistics of the corn and wheat crops of those counties from the years 1889 to 1904. Corn, wheat and hay are the leading crops in Kansas. It would unnecessarily prolong this opinion to copy these tables in full, so we give the figures for 1890, 1895, 1900 and 1904:

Acreage and Production of Corn and Wheat in Kansas—13 Counties.

YEAR.	COUNTY.	CORN.		WHEAT.	
		ACRES.	BUSHELS.	ACRES.	BUSHELS.
1890.	Hamilton	80	400	449	6,636
	Kearney	872	8,720	586	10,658
	Finney	2,423	48,460	1,410	24,740
	Gray	493	2,465	3,335	38,724
	Ford	1,558	12,464	7,190	107,295
	Edwards	2,058	20,580	8,876	168,094
	Pawnee	544	2,720	39,464	591,402
	Barton	3,666	25,662	99,738	1,294,639
	Rice	27,460	329,520	52,941	792,345
	Reno	98,972	989,720	35,121	351,210
	Sedgwick	67,685	744,535	52,506	944,804
	Sumner	19,120	267,680	134,352	2,149,116
	Cowley	63,391	887,474	28,073	282,666
	Totals	288,322	3,340,400	464,041	6,762,329
1895.	Hamilton	404	3,232	4,360	12,576
	Kearney	914	5,698	2,917	6,430
	Finney	2,058	20,580	27,428	69,801
	Gray	1,115	11,150	12,297	12,309
	Ford	12,145	194,320	36,626	109,914
	Edwards	21,222	212,220	47,479	94,958
	Pawnee	19,076	152,608	113,980	342,075
	Barton	103,831	778,732	179,761	359,284
	Rice	153,256	3,371,632	127,200	254,394
	Reno	205,745	7,406,820	89,973	314,573
	Sedgwick	190,646	5,147,442	93,351	279,711
	Sumner	181,642	2,179,704	248,115	619,884
	Cowley	133,745	2,674,900	89,866	673,822
	Totals	1,025,799	22,159,038	1,073,353	3,149,731

Acreage and Production of Corn and Wheat in Kansas—13 Counties—Continued.

YEAR.	COUNTY.	CORN.		WHEAT.	
		ACRES.	BUSHELS.	ACRES.	BUSHELS.
1900.	Hamilton	266	3,990	155	1,550
	Kearney	538	11,298	506	5,492
	Finney	1,213	18,195	427	4,234
	Gray	2,001	30,015	4,023	59,605
	Ford	11,215	145,795	23,416	444,904
	Edwards	25,032	325,416	43,525	696,400
	Pawnee	16,257	146,313	115,931	1,969,801
	Barton	32,649	261,192	254,130	5,081,352
	Rice	71,151	355,755	148,597	3,120,537
	Reno	199,150	1,991,500	110,404	2,097,276
	Sedgwick	153,635	2,766,430	123,339	2,589,811
	Sumner	102,057	2,143,197	288,133	5,761,260
	Cowley	121,398	2,792,154	79,948	1,439,064
	Totals	736,562	10,991,250	1,192,534	23,271,286
1904.	Hamilton	120	1,800	271	2,297
	Kearney	306	6,120	536	6,244
	Finney	759	7,590	7,012	37,382
	Gray	1,579	25,264	17,268	69,590
	Ford	10,631	170,096	72,917	365,299
	Edwards	23,396	584,900	130,313	1,302,834
	Pawnee	13,272	331,800	162,970	1,629,246
	Barton	26,984	728,568	262,673	3,414,731
	Rice	59,851	1,556,126	160,853	2,251,838
	Reno	138,899	4,028,071	207,002	3,518,752
	Sedgwick	132,374	3,441,724	151,635	1,971,255
	Sumner	79,808	1,995,200	294,489	3,828,192
	Cowley	109,708	2,962,116	68,477	821,652
	Totals	597,687	15,839,375	1,536,416	19,219,312

Comparing the tables of population it will be perceived that both the counties in Colorado and Kansas made a considerable increase in the years from 1880 to 1890; that while the Colorado counties continued their increase from 1890 to 1900, the Kansas counties lost. As the withdrawal of water in Colorado for irrigating purposes became substantially effective about the year 1890, it might, if nothing else appeared, not unreasonably be concluded that the diminished flow of the river in Kansas, caused by the action of Colorado, had resulted in making the land more unproductive, and hence induced settlers to leave the State. As against this it should be noted, as a matter of history, that in the years preceding 1890, Kansas passed through a period of depression, with crops largely a failure in different parts of the State. But, more than that, in 1889 Okla-

homa, lying directly south of Kansas, was opened for settlement and immediately there was a large immigration into that territory, coming from all parts of the West, and especially from the State of Kansas, induced by glowing reports of its great possibilities. The population of Oklahoma, as shown by the United States census, was, in 1890, 61,834, and in 1900, 348,331.

Turning to the tables of the corn and wheat products, they do not disclose any marked injury which can be attributed to a diminution of the flow of the river. While there is a variance in the amount produced in the different counties from year to year, it is a variance no more than that which will be found in other parts of the Union, and although the population from 1890 to 1900 in fact diminished, the amount of both the corn and wheat product largely increased. Not only was the total product increased, but the productiveness per acre seems to have been materially improved. Take the corn crop, and per acre, it was, in 1890, 12 bushels and a fraction; in 1895, 21 and a fraction, in 1900, 15, and in 1904, 28 bushels. Of wheat, the product per acre in 1890 was nearly 15 bushels; in 1895 it was only about 3 bushels. (For some reason, while that was a good year for corn, it seems to have been a bad year for wheat.) But in 1900 the product per acre rose to 19 bushels, and in 1904 it was 12 bushels.

These are official figures taken from the United States census reports, and they tend strongly to show that the withdrawal of the water in Colorado for purposes of irrigation has not proved a source of serious detriment to the Kansas counties along the Arkansas River. It is not strange that the western counties show the least development, for being nearest the irrigation in Colorado, they would be most affected thereby. At one time there were some irrigating ditches in these western counties, which promised to be valuable in supplying water and thus increasing the productiveness of the lands in the vicinity of the stream, and it is true that those ditches have ceased to be of much value, the flow in them having largely diminished.

It cannot be denied in view of all the testimony, (for that which we have quoted is but a sample of much more bearing upon the question,) that the diminution of the flow of water in the river by the irrigation of Colorado has worked some detriment to the southwestern part of Kansas, and yet when we compare the amount of this detriment with the great benefit which has obviously resulted to the counties in Colorado, it would seem that equality of right and equity between the two States forbids any interference with the present withdrawal of water in Colorado for purposes of irrigation.

Many other matters have been presented and discussed. We have examined and fully considered them, but, as heretofore stated, we shall have to content ourselves with merely general observations respecting them.

Evidence has been offered of an alleged underflow of the river as it passes through the State of Kansas, and it seems to be the contention on the part of Kansas that beneath the surface there is, as it were, a second river with the same course as that on the surface, but with a distinct and continuous flow as of a separate stream. We are of the opinion that the testimony does not warrant the finding of such second and subterranean stream. If the bed of a stream is not solid rock, but earth through which water will percolate, and, as alleged in plaintiff's bill, the "valley of the river in the State of Kansas is composed of sand covered with alluvial soil," undoubtedly water will be found many feet below the surface, and the lighter the soil the more easily will it find its way downward and the more water will be discoverable by wells or other modes of exploring the subsurface. Undoubtedly, too, in many places there may be corresponding to the flow on the surface a current beneath the surface, but the presence of such subsurface water, even though in places of considerable amount and running in the same direction, is something very different from an independent subsurface river flowing continuously from the Colorado line through the State of Kansas. It is not properly denominated a second and subsurface stream. It is rather to be regarded as merely the accumulation of water which will always be found beneath the bed of any stream whose bottom is not solid rock. Naturally, the more abundant the flow of the surface stream and the wider its channel the more of this subsurface water there will be. If the entire volume of water passing down the surface was taken away the subsurface water would gradually disappear, and in that way the amount of the flow in the surface channel coming from Colorado into Kansas may affect the amount of water beneath the subsurface. As subsurface water, it percolates on either side as well as moves along the course of the river, and the more abundant the subsurface water the further it will reach in its percolations on either side as well as more distinct will be its movement down the course of the stream. The testimony, therefore, given in reference to this subsurface water, its amount and its flow bears only upon the question of the diminution of the flow from Colorado into Kansas caused by the appropriation in the former State of the waters for the purposes of irrigation.

Equally untenable is the contention of Colorado that there are really two rivers, one commencing in the mountains of Colorado and terminating at or near the State line, and the other commencing at or near the place where the former ends, and from springs and branches starting a new stream to flow onward through Kansas and Oklahoma towards the Gulf of Mexico. From time immemorial the existence of a single continuous river has been recognized by geographers, explorers and travelers That there is a great variance in the amount of water flowing down the

channel at different seasons of the year and in different years is undoubted; that at times the entire bed of the channel has been in places dry is evident from the testimony. In that way it may be called a broken river. But this is a fact common to all streams having their origin in a mountainous region, and whose volume is largely affected by the melting of the mountain snows. Thus, from one of complainant's exhibits furnished by the United States Geological Survey, the mean monthly flow at Canon City at the mouth of the Royal Gorge for the years 1890, 1895 and 1900 is as follows:

Arkansas River—Canon City. Mean Monthly Discharge in Second Feet.

	1890.	1895.	1900.
January	310	344	a 345
February	363	361	a 353
March	320	471	a 439
April	477	868	736
May	2,090	1,506	2,251
June	2,611	1,900	3,492
July	1,571	1,413	891
August	670	1,095	273
September	519	635	211
October	531	505	241
November	522	499	266
December	502	444	298

a Approximate.

Doubtless the variance at different seasons of the year is more regular and more pronounced than in those streams whose sources are only slightly elevated and the rise and fall of whose waters is mainly owing to rains. Contrasting, for instance, the Hudson with the Missouri, illustrates this. When the June flood comes down the Missouri River it is a mighty torrent. One can stand on the bluffs at Kansas City and see an enormous volume of water, extending in width from two to five miles to the bluffs on the other side of the river, flowing onward with tremendous velocity and force, and yet at other times the entire flow of the Missouri River passes between two piers of the railroad bridge across the river at that point. No such difference between high and low water appears in the Hudson. In the days when navigation west of the Mississippi was largely by steamboats on the Missouri River, it was familiar experience for the flat-bottomed steamboats, drawing but little water, to be aground on sandbars and detained for hours in efforts to cross them. Gen. Doniphan commanded an expedition which marched from Fort Leavenworth in 1846 up the Arkansas Valley and into the Territory of New Mexico. He did not enter the valley again until shortly before his death in 1887, and when asked what he recognized replied that there were one or two natural objects

like Pawnee rock that appeared as they did when he marched up the valley; the river was the same but all else was changed, and the valley instead of being destitute of human occupation was filled with farm houses and farms, villages and cities—something that he had never expected would be seen in his day.

Summing up our conclusions, we are of the opinion that the contention of Colorado of two streams cannot be sustained; that the appropriation of the waters of the Arkansas by Colorado, for purposes of irrigation, has diminished the flow of water into the State of Kansas; that the result of that appropriation has been the reclamation of large areas in Colorado, transforming thousands of acres into fertile fields and rendering possible their occupation and cultivation when otherwise they would have continued barren and unoccupied; that while the influence of such diminution has been of perceptible injury to portions of the Arkansas Valley in Kansas, particularly those portions closest to the Colorado line, yet to the great body of the valley it has worked little, if any, detriment, and regarding the interests of both States and the right of each to receive benefit through irrigation and in any other manner from the waters of this stream, we are not satisfied that Kansas has made out a case entitling it to a decree. At the same time it is obvious that if the depletion of the waters of the river by Colorado continues to increase there will come a time when Kansas may justly say that there is no longer an equitable division of benefits and may rightfully call for relief against the action of Colorado, its corporations and citizens in appropriating the waters of the Arkansas for irrigation purposes.

The decree which, therefore, will be entered will be one dismissing the petition of the intervenor, without prejudice to the rights of the United States to take such action as it shall deem necessary to preserve or improve the navigability of the Arkansas River. The decree will also dismiss the bill of the State of Kansas as against all the defendants, without prejudice to the right of the plaintiff to institute new proceedings whenever it shall appear that through a material increase in the depletion of the waters of the Arkansas by Colorado, its corporations or citizens, the substantial interests of Kansas are being injured to the extent of destroying the equitable apportionment of benefits between the two States resulting from the flow of the river. Each party will pay its own costs.

In closing, we may say that the parties to this litigation have approached the investigation of the questions in the most honorable spirit, seeking to present fully the facts as they could be ascertained from witnesses and discussing the evidence and questions of law with marked research and ability.

Mr. Justice MOODY took no part in the decision of this case.

Mr. Justice White and Mr. Justice McKenna concur in the result.